STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF AIR AND WASTE MANAGEMENT
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH
89 KINGS HIGHWAY
DOVER, DE 19901

IN THE MATTER OF:	) FINAL ADMINISTRATIVE) ORDER ON CONSENT
E.I. du Pont de Nemours and Company Former DuPont Seaford Nylon Plant DuPont Corporate Remediation Group Chestnut Run Plaza 715 974 Centre Road Wilmington, DE 19805 -1269	))))))))
	) Proceeding under 7 DE Admin.) Code 1302, §§ 122, 124, and) 264, Delaware Regulations) Governing Hazardous Waste
EPA I.D. No. DED002348845	) ("DRGHW");) Chapters 60 and 63 of Title 7 of the) Delaware Code, and Chapter 80 of) Title 29 of the Delaware Code
	)
RESPONDENT	)

FINAL ADMINISTRATIVE ORDER ON CONSENT

The parties to this Final Administrative Order on Consent ("Consent Order" or "Order"), the State of Delaware Department of Natural Resources and Environmental Control ("DNREC"), and E.I. du Pont de Nemours and Company ("Respondent" or "DuPont"), individually referred to as a "Party" and collectively as "Parties," having agreed to enter into this Consent Order, it is therefore ordered and agreed that:

I. JURISDICTION

This Consent Order is issued pursuant to the authority vested in the State of Delaware Department of Natural Resources and Environmental Control ("DNREC") in accordance with 7 DE Admin. Code 1302, Parts 122, 124, 261 and 264, Delaware Regulations Governing Hazardous Waste ("DRGHW"); the provisions of Chapters 60 and 63 of Title 7 of the Delaware Code and the regulations thereunder; the provisions of Chapter 80 of Title 29 of the Delaware Code; and the authority delegated to the State of

Delaware under Subtitle C of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. as set forth in 40 CFR Part 272 Subpart I.

This Consent Order is issued to Respondent, the owner of real property located at 25876 DuPont Road in Seaford, Delaware (the "Real Property"), on which the nylon textile manufacturing plant known as the Seaford Nylon Plant is located. The Seaford Nylon Plant and the Real Property are referred to hereinafter as the "Facility."

Respondent agrees not to contest DNREC's authority to issue this Consent Order and to enforce its items. Further, the Respondent will not contest DNREC's authority to: compel compliance with this Consent Order in any subsequent enforcement proceeding, either administrative or judicial; require Respondent's full or interim compliance with the terms of this Order; or impose sanctions for violations of this Order.

II. PARTIES BOUND

A. This Consent Order shall apply to and be binding upon DNREC, Respondent, and their respective agents, successors, and assigns until the Consent Order is terminated pursuant to Section XXII ("TERMINATION AND SATISFACTION").

B. Any changes in ownership of any part of the Facility or in the corporate, or partnership status of the Respondent including, but not limited to, any transfer of assets or real or personal property, shall in no way alter, diminish, or otherwise affect Respondent's obligations under this Order, except as otherwise set forth in Section VI.E ("OBLIGATIONS REGARDING SUCCESSORS-IN-INTEREST").

C. Respondent shall provide a copy of this Consent Order to Respondent's supervisory personnel responsible for implementation of the work under this Consent Order and to all contractors, subcontractors and consultants retained to conduct the field activities required under Section VI ("CORRECTIVE MEASURES") of this Consent Order within seven (7) days of the effective date of the Consent Order or the date of such retention, whichever is later. All contracts, agreements, or other arrangements with such persons shall require such persons to conduct and/or monitor the work in accordance with the requirements of this Order. Notwithstanding the terms of any such contract, agreement, or arrangement, Respondent is responsible for complying with this Consent Order and for ensuring that all such persons conduct and/or monitor such work in accordance with the requirements of this Order. The existence of any provision or term of any contract, agreement, or other arrangement requiring a contractor, subcontractor, laboratory, or consultant to conduct or monitor the work in accordance with the requirements of this Consent Order shall not excuse or otherwise relieve Respondent's obligation to comply with this Order.

III. STATEMENT OF PURPOSE

In entering into this Consent Order, the mutual objectives of DNREC and the Respondent are the protection of human health and the environment through the ongoing operation, monitoring and/or maintenance of the corrective measures described in DNREC's Record of Decision and Response to Comments, May 2006 as provided herein.

IV. FINDINGS OF FACT

A. Respondent is a corporation doing business in the State of Delaware and is a "person" as defined in§ 122.2 of the DRGHW and 7 Del. C. §§ 6002 (37) and 6302 (10).

B. Respondent is the current owner of the Real Property, and the previous owner and operator of the Seaford Nylon Plant. The Facility occupies 16 parcels of land and is known as Sussex County tax parcel numbers: 5-31-13.00-7.00, 5-31-13.00-8.00, 5-31-13.00-9.00, 5-31-13.00-10.00, 5-31-13.00-11.00, 5-31-13.00-2.00, 5-31-13.00-3.00, 5-31-13.00-4.00, 5-31-13.00-5.01, 5-31-13.00-16.00, 5-31-13.00-17.00, 5-31-13.00-18.00, 5-31-13.00-1.00, 5-31-13.00-7.01, and 5-31-13.00-12.00. The Facility is bordered by the Nanticoke River on the south and east, by the Norfolk Southern Railroad on the north, and by Chapel Branch on the west. The city of Seaford is located to the north and west of the Facility and the town of Blades is located northeast of the Facility on the eastern banks of the Nanticoke River. The Seaford Nylon Plant began operations in 1939 and was owned and operated by DuPont until April 30, 2004, when the assets that constitute the Seaford Nylon Plant were transferred to INVISTA S.à r.l. ("INVISTA").

C. On February 25, 1992, the EPA and Respondent entered into a Final Administrative Order on Consent (the "RFI/CMS Order"), Docket Number RCRA-III-051-CA, pursuant to § 3008(h) of RCRA, 42 U.S.C. § 6928(h). The RFI/CMS Order required Respondent to conduct Interim Measures ("IM"), a RCRA Facility Investigation ("RFI"), and a Corrective Measures Study ("CMS") as provided in the RFI/CMS Order. The RFI requirements included an evaluation of the extent of releases of hazardous wastes and/or hazardous constituents into soils, sediments, groundwater, and surface water. The CMS requirements provided an evaluation of clean-up alternatives based on criteria set forth in the RFI/CMS Order. The RFI/CMS Order listed 19 Solid Waste Management Units (SWMUs), and one additional SWMU was identified during the Phase II RFI. T hese SWMUs are as follows:

SWMU 1	Solid Waste Landfill A
SWMU 2	Laboratory Waste Pit
SWMU 3	Biotreatment Facility
SWMU 4	Deionizer Waste Tank
SWMU 5	Diversion Ponds
SWMU 6	Solid Waste Landfill B
SWMU 7	Utility Ash Settling Ponds
SWMU 8	Drummed Waste Storage
SWMU 9	Dopp Kettle Heels Pit
SWMU 10	Spray Irrigation Field
SWMU 11	Waste Nylon Landfill
SWMU 12	Retention Ponds
SWMU 13	Solid Waste Landfill C
SWMU 14	Waste Storage Tank (fiber finish oil)
SWMU 15	Drummed Waste Oils Storage Area
SWMU 16	Trade Waste Retention Pond
SWMU 17	Coal Ash Landfill

SWMU 18 90-Day Hazardous Waste Storage Area
SWMU 19 Former Coal Ash Disposal Area
SWMU DRAINAGE DITCH (added by EPA/DNREC during Phase II RFI)

D. Section IV ("Findings of Fact") of the RFI/CMS Order is hereby incorporated herein by reference.

E. On April 30, 2004, the buildings and other improvements, machinery, equipment and certain other assets associated with the Seaford Nylon Plant were transferred to INVISTA. DuPont retained ownership of the Real Property, and the Real Property was leased to INVISTA pursuant to a Ground Lease dated April 30, 2004.

F. Respondent completed the Phase I and II RCRA Facility Investigations (RFI) under the direction of U.S. EPA Region III and DNREC. The final Phase II RFI Report was submitted by Respondent on January 5, 2005. DNREC approved the Phase II RFI Report in a letter dated January 31, 2005. DNREC determined that the CMS was to address SWMU-1 (carbon tetrachloride in groundwater), SWMU-7/12/13 (arsenic in groundwater) and SWMU-13/16/17 (physical hazards of exposed solid waste). DNREC determined that no further action was required for any of the other identified SWMUs.

G. Respondent submitted a final revised Corrective Measures Study Report ("CMS Report") to DNREC on August 26, 2005. The CMS Report evaluated remedial alternatives for the Facility, and sets forth preferred and recommended corrective measures for SWMU-1, SWMU-7/12/13 and SWMU-13/16/17. The CMS Report also sets forth a site specific action level for arsenic in groundwater at SWMU-7/12/13 that is protective of achieving the remedial goal at site receptors. Respondent completed the work plan and design for the Facility with the submittal of the revised DuPont Seaford RCRA Focused Corrective Measures Study that was modified and approved by DNREC on February 2, 2006. DNREC approved the CMS Report in a letter dated February 2, 2006, with the condition that additional monitoring wells be installed and sampled in the area of SWMU-7/12/13. In a letter dated June 3, 2010, DNREC stated that the CMS Report is the functional equivalent of a Corrective Action Plan.

H. On April 16, 2006, DNREC issued for public comment a Statement of Basis ("SB") which described and evaluated corrective measure alternatives to address releases of hazardous waste and/or hazardous waste constituents at and/or from the Facility and contained DNREC's recommended corrective measures. The SB and the Administrative Record were made available to the public for a thirty (30) day comment period. The public comment period began on April 16, 2006 and ended on May 15, 2006.

I. In Sections II and XI of the SB, DNREC identified the proposed corrective measures for the Facility, and identified the applicable remedial goals for the contaminants of concern in the groundwater at the Facility.

J. On May 25, 2006, DNREC issued a Final Record of Decision and Response to Comments ("ROD") which adopted and incorporated the SB by reference, identified the final remedy selected by DNREC and provided responses to all comments received during

the public comment period. The ROD is set forth in Attachment A to this Consent Order and is incorporated herein and is a part hereof.

K. EPA Region III determined in a letter dated January 16, 2007 that Respondent had satisfactorily completed the RFI/CMS Order, Docket Number RCRA-II-051-CA and terminated the RFI/CMS Order.

L. Respondent completed the Corrective Measures required by the ROD and documented their completion in a Corrective Measures Implementation (CMI) Construction Completion Report dated May 9, 2007.

M. On August 20, 2009, an environmental covenant as entered into by DNREC and Respondent was recorded in Sussex County, placing certain covenants and restrictions on portions of the Real Property, including the creation of two Groundwater Management Zones. This environmental covenant was amended by DNREC and Respondent, and the amended environmental covenant was recorded in the Office of the Sussex County Recorder of Deeds on August 11, 2014.

N. By letter dated June 3, 2010, DNREC confirmed that Respondent implemented the remediation work required by the ROD and documented its completion in the CMI Construction Completion Report. DNREC further confirmed that the remediation work required under the CMS and ROD has been implemented, and designated the Facility as "complete with controls".

O. Respondent has completed groundwater and surface water monitoring and has submitted annual Sampling, Analysis, Monitoring, and Reporting (SAMR) reports as required by the ROD with results from 2007, 2008, 2009, 2010 and 2011, and 2012 all of which have been approved by DNREC.

P. The applicable remedial goal set forth in the SB and the ROD for SWMU 1 was achieved for three (3) consecutive years of monitoring from 2006 to 2008, and DNREC approved the discontinuation of monitoring for well L-6D at SWMU-1 in a letter dated October 5, 2010.

Q. A Sampling, Analysis, Monitoring and Reporting Program Work Plan was submitted to DNREC and was approved by DNREC on August 6, 2014 (the "SAMR Work Plan"). The SAMR Work Plan is set forth on Attachment B. The selected remedies (including monitoring and reporting requirements), action levels and status of corrective measures at the Facility are set forth in the SAMR Work Plan.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and after consideration of the Administrative Record supporting the issuance of this Consent Order, DNREC has made the following Conclusions of Law and Determinations:

A. Respondent is a "person" within the meaning of § 122.2 of the DRGHW and 7 Del. C. §§ 6002 (37) and 6302 (10).

B. Respondent is the current owner and operator of the Real Property and the prior owner and operator of the Seaford Nylon Plant, and has been authorized to operate under §§ 122.2, 122.70, and 264.3 of the DRGHW.

C. DNREC is authorized to issue and implement this Consent Order under the applicable provisions of the Resource, Conservation and Recovery Act, 42 U.S.C. § 6901 et seq. and the authority delegated to the State of Delaware as set forth in 40 CFR Part 272 Subpart I.

D. The contaminants of concern referred to in Section IV.F of this Consent Order are hazardous waste constituents within the meaning of §§ 122.2 and 261.3 of the DRGHW, and 7 Del. C. § 6302 (8).

E. There is or has been a release of hazardous waste or hazardous waste constituents into the environment from the Facility within the meaning of 7 Del. C. § 6309 (m).

F. The corrective action at the Facility is complete with controls.

G. This Consent Order and the actions required herein are consistent with the SB and the ROD and meet all applicable requirements for corrective action at the Facility. This Consent Order implements and satisfies the requirements of the SB and the ROD, and fulfills the requirement for a Corrective Measures Implementation Order as specified therein.

H. The actions required by this Consent Order are necessary to protect human health and/or the environment.

VI. CORRECTIVE MEASURES

As set forth in § IV of this Consent Order, DNREC has determined that the corrective measures work plan, design and construction requirements have been fully implemented in accordance with the approved CMS, SB and ROD.

Pursuant to §§ 264.100 and 264.101 of the DRGHW, Respondent agrees to and is hereby ordered to perform the following acts in the manner and by the dates specified herein. All work undertaken pursuant to this Consent Order shall be developed and performed in accordance with a Health and Safety Plan as defined within the SAMR Work Plan and as may be amended from time to time, the ROD set forth in Attachment A; and the DRGHW.

"Days" as used herein shall mean calendar days unless specifically stated otherwise.

A. CORRECTIVE MEASURES OPERATION, MAINTENANCE AND MONITORING

1. Respondent shall conduct sampling and monitoring in accordance with the SAMR Work Plan, as may be amended from time to time by mutual written consent of Respondent and DNREC.

2. Respondent shall conduct any operation and maintenance activities in accordance with the SAMR Work Plan, as may be amended from time to time by mutual written consent of Respondent and DNREC.

3. On July 1st of each year, Respondent shall submit to DNREC an annual Sampling, Analysis, Monitoring and Reporting Report ("SAMR Report") which contains the information described in the SAMR Work Plan. Respondent shall not be required to submit an annual SAMR Report in any year that a Corrective Measure Five-Year Assessment Report is submitted pursuant to Section VI.A.4 of this Order.

4. No later than July 1st of the fifth year after the effective date of this Consent Order, and every five (5) years thereafter, Respondent shall submit a Corrective Measures Five-Year Assessment Report. Such Report shall contain an evaluation of the past and projected future effectiveness of the corrective measures in attaining the remedial goals set forth in the ROD.

B. HEALTH AND SAFETY PLAN

Respondent shall comply with applicable provisions of the Health and Safety Plan ("HASP") as defined within the SAMR Work Plan, as the SAMR Work Plan may be amended from time to time by mutual written consent of Respondent and DNREC.

C. C OMPLETION OF CORRECTIVE MEASURES

1. At such time as Respondent determines that the remedial goals set forth in the ROD have been achieved and all other requirements of Section VI.A of this Consent Order have been completed, Respondent shall submit an application for a Certification of Completion for all corrective measures ("Certification of Completion") to DNREC for approval. T he application for Certification of Completion shall provide documentation sufficient to support a determination that the remedial goals set forth in the ROD have been achieved and include all available documentation supporting such a determination, and shall include a statement from a Delaware registered professional engineer or geologist and the Respondent's project manager that the remedial goals have been attained in satisfaction of the requirements of the ROD.

2. Upon receipt of Respondent's application for a Certification of Completion or at any time prior to DNREC's receipt of such application, DNREC shall consider and make a determination, on the basis of the SAMR Reports, the Corrective Measures 5-Year Assessment Report and any other relevant information, whether the corrective measures have achieved or are achieving the remedial goals set forth in the SB. If DNREC determines that the corrective measures have achieved or are achieving the remedial goals

set forth in the SB, DNREC shall notify Respondent of such determination and shall issue a Certification of Completion.

D. USE RESTRICTIONS

Commencing on the effective date of this Consent Order, and thereafter, unless (1) required for implementation of the work under this Consent Order; or (2) otherwise determined to be necessary by DNREC, Respondent shall comply with the restrictions as specified in the Environmental Covenant, and any amendments, on the Real Property.

E. OBLIGATIONS REGARDING SUCCESSORS-IN-INTEREST

1. Title Notice

Within fifteen (15) days after Respondent's receipt of a fully executed copy of this Consent Order, Respondent shall submit to DNREC for review and approval a notice to be filed with the Recorder of Deeds, Sussex County, Delaware ("Title Notice and Environmental Covenant"), which shall provide notice to all successors-in-title that Respondent owns the Real Property, that DNREC selected a remedy for the Facility on May 26, 2006, and that DNREC and Respondent have entered into this Consent Order requiring Respondent to implement the requirements set forth herein. Such Title Notice shall identify the administrative docket number of this Consent Order and the effective date of this Consent Order. Such Title Notice shall include the obligation to comply with the land use restrictions of Section VI.D. Respondent shall record the Title Notice and Environmental Covenant within ten (10) days of DNREC's approval of the Title Notice and Environmental Covenant. Respondent shall not modify or release such Title Notice and Environmental Covenant without prior written approval of DNREC. Respondent shall provide DNREC with a certified copy of the recorded Title Notice and Environmental Covenant within ten (10) days of recording such Title Notice.

2. Transfer of Real Property

It is acknowledged by the Parties that DuPont intends to enter into an agreement to transfer title to the Real Property from DuPont to INVISTA shortly after the Effective Date of this Order. At that time, it is further contemplated and acknowledged by the Parties that all rights and obligations under this Consent Order will be assigned and transferred to INVISTA, whereby upon the effective date of such assignment and assumption, INVISTA will assume the liabilities and obligations of this Order, and DuPont will be released from the liabilities and obligations of this Consent Order.

3. Notice of Other or Additional Transfers

Respondent will give written notice of this Consent Order to any successor in interest and to any transferee (other than as set forth in Section VI.E.2) prior to transferring ownership or operation of the Facility or a portion thereof and will notify DNREC in writing not less than ten (10) days in advance of the transfer. This written notice will describe how Respondent has assured that, despite the transfer, all institutional controls required now or in the future for the Facility will be implemented and maintained. This

Consent Order shall not be construed to impede the transfer of any ownership or operation of the Real Property or the Seaford Plant or any portion of either as long as the requirements of this Consent Order are met. This Consent Order shall not be construed to prohibit a contractual allocation, as between Respondent and any third party that becomes an owner or operator of the Real Property or the Seaford Plant or any portion of either, of the burdens of compliance with this Consent Order.

4. Continuing Obligation

In the event of any conveyance, transfer or assignment of any interest in the Facility or any portion thereof other than the transfer described in Section VI.E.2, including, but not limited to, fee interests, leasehold interests, easements, land use interests, licenses and mortgage interests, Respondent shall continue to be bound by all terms and conditions, and subject to all benefits, of this Consent Order, until modification or assignment of this Consent Order transferring the obligations and liabilities of this Consent Order to the transferee and releasing Respondent from the obligations and liabilities hereunder. Respondent may assign this Consent Order to any such transferee by execution of an assignment agreement with the transferee and by providing contemporaneous written notice to DNREC of the assignment. Within thirty (30) days of receiving notice of the assignment, DNREC may require the transferee to provide it with such information as DNREC deems necessary to ensure that the transferee has both the technical and financial abilities to assume the obligations and liabilities of this Consent Decree. Should DNREC determine that the transferee does not have the technical or financial ability to assume the obligations and liabilities of the Consent Order than the assignment shall be ineffective and no transfer shall result. In the event, DNREC does not object to the transfer, the assignment will be effective and Respondent will be released from the obligations and liabilities hereunder.

5. Reservation of Easement

In the event of a conveyance, transfer or assignment of any interest in the Facility or any portion thereof, that includes Real Property that is subject to the corrective measures, operation, maintenance and monitoring specified in Section VI of this Consent Order, Respondent shall expressly reserve in the deed or other instrument effecting the transfer an irrevocable and permanent easement which (1) grants Respondent access for the purpose of carrying out its obligations under this Consent Order, until Respondent is released from such obligations by DNREC or assignment of this Consent Order by Respondent to a third party in accordance with the terms of this Consent Order; and (2) imposes upon the subsequent grantee's use or ownership of the Facility the restrictions of Section VI.D of this Consent Order. Thereafter, Respondent shall enforce the terms of any such easement reserved pursuant to this Section VI.E.5 against all subsequent grantees of a conveyance, transfer or assignment of any interest in the Facility or any portion thereof, until released from such obligations by DNREC or assignment of this Consent Order by Respondent to a third party in accordance with the terms of this Consent Order.

F. CONTRACTOR REVIEW

1. All work performed pursuant to this Consent Order shall be under the direction and supervision of a qualified professional with expertise in the relevant aspects

of hazardous waste site investigation and remediation, including the implementation of corrective measures. Within forty-five (45) days after the effective date of this Consent Order, Respondent shall submit to DNREC, in writing, the names and titles of any professional consultants/contractors (hereinafter "contractors") to be used in carrying out the terms of this Consent Order. Notwithstanding Respondent's selection of any qualified contractor, nothing herein shall relieve Respondent of its obligation to comply with the terms and conditions of this Consent Order.

2. DNREC shall have the right to disapprove, at any time, the use of any contractor selected by Respondent pursuant to paragraph 1, immediately above, and paragraph 3, immediately below. DNREC's disapproval right shall be exercised within thirty (30) days after Respondent's submission of the name and title of any such consultant, and shall not be exercised unreasonably. This selection shall not be subject to review under Section XIV of this Consent Order ("DISPUTE RESOLUTION") or otherwise. W ithin thirty (30) days of receipt from DNREC of a written notice disapproving the selection of any contractor, Respondent shall notify DNREC, in writing, of the name and title of the contractor who will replace the contractor disapproved by DNREC, and during such thirty (30) day period Respondent shall have the right to use the contractor that was disapproved.

3. Respondent shall notify DNREC within th irty (30) days after voluntarily replacing any professional consultant/contractor used in carrying out the terms of this Consent Order, and shall submit to DNREC the names and titles of such replacement contractor.

G. ADD ITIONAL WORK

1. At any time during the implementation of the corrective measures operation, maintenance and monitoring specified in Section VI of this Consent Order, DNREC may determine that the level of any hazardous waste constituent and/or hazardous waste identified in the RFI/CMS that is in the groundwater has increased above the action level set forth in the approved CMS Report and SAMR Work Plan. In such event, DNREC may determine that additional work is necessary to perform supplemental and/or alternative corrective measures pursuant to Section 3008(h) of RCRA, applicable regulations and/or guidance.

2. In the event DNREC makes such a determination, DNREC may request, in writing, that Respondent perform such additional work. DNREC shall specify the basis and reasons for its determination that additional work is necessary.

3. Within fifteen (15) days after the receipt of such request, or other schedule mutually agreed to by both DNREC and Respondent, Respondent shall have the opportunity to meet and/or confer with DNREC to discuss the additional work. In the event that Respondent agrees to perform such additional work, Respondent shall submit to DNREC for review and approval a Work Plan for the additional work. Such Work Plan shall be submitted within forty-five (45) days of receipt of DNREC's determination that additional work is necessary, or otherwise in accordance with a later alternative schedule established by DNREC. Upon DNREC's approval of a Work Plan, the Work Plan shall be incorporated into and become enforceable under this Consent Order, and Respondent shall implement it in accordance with the schedule and provisions contained therein. In the

event of a dispute between DNREC and Respondent over the Work Plan or otherwise with regard to the additional work DNREC determines is necessary, the dispute resolution procedures of Section XIV, below, shall apply.

4. If Respondent declines to perform additional work, DNREC reserves the right to order Respondent to perform such additional work; to perform such additional work itself and seek to recover all costs of performing such additional work from Respondent; and/or to take any other appropriate action under RCRA or any other legal authority.

H. SUBMISSIONS / APPROVAL

1. DNREC will review documents submitted pursuant to this Consent Order (hereinafter collectively referred to as "Submissions") and will notify Respondent in writing of DNREC's approval or disapproval of the Submission(s) or any part thereof. In the event of DNREC's disapproval, DNREC shall specify in writing any deficiencies in the Submission(s). Such disapproval shall not be subject to the dispute resolution procedures of Section XIV, below. Notwithstanding any notice of disapproval, Respondent shall implement, at the direction of DNREC, any action required by any non-deficient portion of the Submission(s).

2. Within thirty (30) days of receipt of DNREC's comments on a Submission, Respondent shall submit to DNREC for approval a revised Submission which responds to DNREC's comments and/or corrects any deficiencies identified by DNREC. In the event that DNREC disapproves of the revised Submission, DNREC reserves the right to revise or prepare such Submission and/or to take any other appropriate actions under RCRA or any other legal authority. Any Submission prepared by Respondent that is approved or revised by DNREC under this Consent Order shall be deemed incorporated into and made an enforceable part of this Consent Order.

VII. QUALITY ASSURANCE

Throughout all sample collection and analysis activities, Respondent shall use quality assurance/quality control ("QA/QC"), and chain-of-custody procedures, as specified in the DNREC-approved SAMR Program Work Plan. In addition, Respondent shall ensure that laboratories used for analyses by Respondent perform such analyses according to the EPA methods included in "Test Methods for Evaluating Solid Waste" (SW-846, November 1986, Third Edition as updated) or other methods deemed satisfactory to DNREC, including but not limited to QA/QC and chain-of-custody procedures. If methods other than EPA methods are to be used, Respondent shall submit all protocols to be used for analyses to DNREC for approval pursuant to Section VI.H at least thirty (30) days prior to the commencement of such analyses.

VIII. PUBLIC REVIEW OF ADMINISTRATIVE RECORD

The Administrative Record supporting the issuance of this Consent Order will be available for public review during business hours at the following location:

Department of Natural Resources and Environmental Control

Division of Waste and Hazardous Substances
Solid and Hazardous Waste Management Section
Richardson & Robbins Building
89 Kings Highway
Dover, DE 19901
Telephone: (302) 739-9403

IX. ON-SITE AND OFF-SITE ACCESS

A. DNREC and/or its authorized representatives shall have the authority to enter and freely move about all property at the Facility upon notice to Respondent, during normal business hours upon inspection of proper credentials ,and during the effective dates of this Consent Order for the purposes of: interviewing Facility personnel and contractors related to work undertaken pursuant to this Consent Order; inspecting records and operating logs related to work undertaken pursuant to the Consent Order; reviewing the progress of Respondent in carrying out the terms of this Consent Order; conducting such tests, sampling, or monitoring as DNREC deems necessary related to work undertaken pursuant to this Consent Order; using a camera, sound recording, or other documentary type equipment related to work undertaken pursuant to this Consent Order (subject to Confidentiality Claims and review by Respondent); and verifying the reports and data submitted to DNREC by Respondent. Said access will be subject to the Facility's Health & Safety and Operational procedures. Respondent shall permit DNREC and its authorized representatives to inspect and copy records, files, photographs, documents, and other writings, in its possession or under its control, related to work undertaken pursuant to this Consent Order, including all sampling and monitoring data, which pertain to work undertaken pursuant to this Consent Order (7 Del. C. Section 6024).

B. To the extent that additional work is required b y this Consent Order pursuant to Section VI.G, or by any approved Work Plan prepared pursuant hereto, and such additional work must be done on property not owned or controlled by Respondent, Respondent shall use reasonable efforts to obtain site access agreement(s) from the present owner(s) and/or lessee(s) of such property, as appropriate, within thirty (30) days of receipt of DNREC's approval of any Work Plan pursuant to this Consent Order which requires work on such property. For the purposes of this paragraph, reasonable efforts shall consist of: 1) a certified letter from Respondent to the present owner(s) or lessee(s) of such property, as appropriate, requesting agreements to permit Respondent, DNREC, and its authorized representatives access to such property; 2) prompt communication by the Respondent with the property owner(s) or lessee(s) to inform them of the nature of the work to be done on their property, the time it will take, the disturbance (if any) that will occur, and the restoration (if necessary) to be done when the work is finished. In the event that such agreements for access are not obtained within sixty (60) days after the receipt of DNREC's approval of any Work Plan pursuant to this Consent Order which requires work on property which is not owned or controlled by Respondent, Respondent shall notify DNREC, in writing, within seven (7) days after failure to obtain such agreements, regarding the efforts undertaken to obtain such agreements. In the event the Respondent fails to obtain access, after using reasonable efforts as described in this paragraph, DNREC, in its un-reviewable discretion, will assist Respondent in obtaining off-site access for Respondent.

C. Nothing in this Consent Order limits or otherwise affects DNREC's rights of access and entry pursuant to applicable law, including, but not limited to RCRA and any other applicable law.

X. SAMPLING AND DATA/DOCUMENT AVAILABILITY

A. Respondent shall submit to DNREC the results of all sampling and/or tests or other data generated by, or on behalf of, Respondent in accordance with the requirements of this Consent Order and the Attachments appended hereto and incorporated herein.

B. With regard to the implementation of the SAMR Work Plan, Respondent shall notify the DNREC P roject C oordinator, in writing, at least fifteen (15) days in advance of any field activities, such as well drilling, installation of equipment, or sampling. At the request of DNREC, Respondent shall provide or allow DNREC or its authorized representatives to take split or duplicate samples of all samples collected by Respondent pursuant to this Consent Order. Nothing in this Consent Order shall limit or otherwise affect DNREC's authority to collect samples pursuant to applicable law, including, but not limited to, RCRA.

C. Respondent may assert a business confidentiality claim covering all or part of any information submitted to DNREC pursuant to this Consent Order in the manner described in Section 122.12 of the DRGHW and 7 Del. C. Section 6304. Any assertion of confidentiality shall be adequately substantiated by Respondent when the assertion is made in accordance with 7 Del. C. Section 6304(c). Information subject to a confidentiality claim shall be disclosed only to the extent allowed by, and in accordance with, the procedures set forth in Section 122.12 of the DRGHW and 7 Del. C. Section 6304. If no such confidentiality claim accompanies the information when it is submitted to DNREC, it may be made available to the public by DNREC without further notice to Respondent. Respondent shall not assert a confidentiality claim with regard to any physical, sampling, monitoring, or analytical data sampled pursuant to this Consent Order.

D. If Respondent asserts a privilege with respect to any document which DNREC seeks to inspect or copy pursuant to this Consent Order, the Respondent shall provide DNREC within seven (7) days from the date of DNREC's request to inspect or copy such document with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the contents of the document, record, or information; and
6) the nature and basis of the privilege asserted by the Respondent. However, no document, record, or information created, generated, or collected, as required by the terms of this Consent Order, shall be withheld on the grounds that it is privileged.

XI. RECORDS PRESERVATION

Respondent shall preserve, during the pendency of this Consent Order and for a period of three (3) years after termination of this Consent Order, at least one copy of all non-identical data, records, and documents in its possession or in the possession of

its divisions, officers, directors, employees, agents, successors, and assigns that are required by the provisions of this Consent Order. Respondent shall make such records available to DNREC for inspection or shall provide copies of such records to DNREC, upon the request of DNREC. Respondent shall not destroy any record to which DNREC has requested access for inspection and/or copying until DNREC has obtained such access or withdrawn its request for such access. Nothing in this Section XI shall in any way limit the authority of DNREC under 7 Del. C. Section 6310, or any other access or information-gathering authority.

XII. PROJECT COORDINATORS

A. DNREC hereby designates the Environmental Program Administrator of the Solid and Hazardous Waste Management Section ("SHWMS") as the DNREC Project Coordinator. Respondent hereby designates Michael R. Liberati as Respondent's Project Coordinator. Addresses and telephone numbers for the Project Coordinators are provided in Section XIII. A, below. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. The DNREC Project Coordinator will be DNREC's primary designated representative at the Facility. To the maximum extent possible, all communications between Respondent and DNREC, and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Consent Order, shall be directed through the Project Coordinators.

B. Each Party agrees to provide written notice within seven (7) days to the other Party's Project Coordinator after changing a Project Coordinator. Respondent's legal counsel shall not serve as Respondent's Project Coordinator.

C. The absence of the DNREC Project Coordinator from the Facility shall not be cause for the delay or stoppage of work, unless this work cannot proceed without the DNREC Project Coordinator's on-site review and/or approval.

XIII. NOTIFICATION

A. Unless otherwise specified, reports, correspondence, approvals, disapprovals, notices, or other submissions relating to or required under this Consent Order shall be in writing and shall be sent as follows:

B.

1. Two copies of all documents to be submitted to DNREC shall be sent to:

   Solid and Hazardous Waste Management Section
   Department of Natural Resources and Environmental Control
   Division of Waste and Hazardous Substances
   89 Kings Highway
   Dover, DE 19901

2. Documents submitted to Respondent shall be sent to:

   DuPont Corporate Remediation Group
   c/o Michael R. Liberati, Project Coordinator

133 Blakiston Lane
Warwick, MD 21912
(302) 598-9936
Michael.R.Liberati@dupont.com

C. Any notice, report or data presentation that is required to be submitted by Respondent under this Consent Order shall be certified by a responsible corporate officer or a duly authorized representative of a responsible corporate officer. A "responsible corporate officer" means a principal executive officer of at least the level of vice-president. A person is a "duly authorized representative" only if: 1) the authorization is made in writing by a person described above; 2) the authorization specifies either an individual or position having responsibility for overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or well field, superintendent, or position of equivalent responsibility; and 3) the written authorization is submitted to the Project Coordinator designated by Section XII of this Consent Order. For purposes of this certification requirement, Respondent's Project Coordinator is deemed to be a duly authorized representative.

D. The certification required by paragraph B, above, shall be in the following form:

"I certify that the information contained in or accompanying this **[type of submission]** is true, accurate, and complete.

As to **[the/those identified portion(s)]** of this **[type of submission]** for which I cannot personally verify **[its/their]** accuracy, I certify under penalty of law that this **[type of submission]** and all attachments were prepared in accordance with procedures designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, or the immediate supervisor of such person(s), the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

Signature: _____

Name: _____

Title: _____

XIV. DISPUTE RESOLUTION

A. If Respondent disagrees, in whole or in part, with any DNREC disapproval, modification or other decision or directive made by DNREC pursuant to this Consent Order, Respondent shall notify DNREC in writing of its objections, and the basis therefore, within fifteen (15) days of receipt of DNREC's disapproval, decision, or directive. Such notice shall set forth the specific points of the dispute; the position which Respondent asserts should be adopted as consistent with the requirements of this Consent Order, the basis for Respondent's position, and any matters which Respondent considers necessary for DNREC's determination. DNREC and Respondent shall have an additional thirty (30) days from receipt by DNREC of the notification of objection and dispute, during which time representatives of DNREC and Respondent may confer in person or by telephone to resolve any disagreement. If an agreement is reached, the resolution shall be formalized in a written document and signed by an authorized representative of each Party. In the event that resolution is not reached within this thirty (30) day period, DNREC will furnish to Respondent, in writing, its decision on the pending dispute.

B. The existence of a dispute, as defined in this Section, and DNREC's consideration of matters placed into dispute, shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this Consent Order during the pendency of the dispute resolution process.

C. Notwithstanding any other provisions of this Consent Order, no action or decision by DNREC shall constitute final agency action giving rise to any right to judicial review prior to DNREC's initiation of judicial action to compel Respondent's compliance with this Consent Order.

XV. FORCE MAJEURE AND EXCUSABLE DELAY

A. Respondent shall perform the requirements of this Consent Order in the manner and within the time limits set forth herein, unless the performance is prevented or delayed by events which constitute a force majeure. Respondent shall have the burden of proving such a force majeure event. A force majeure is defined as any event rising from causes not reasonably foreseeable and beyond the control of Respondent, which cannot be overcome by due diligence and which delays or prevents performance in the manner or by a date required by this Consent Order. Such events do not include increased costs of performance, changed economic circumstances, or reasonably foreseeable weather conditions that could have been overcome by due diligence. Depending upon the circumstances and Respondent's response to such circumstances, failure of a permitting authority to issue a necessary permit in a timely fashion may constitute force majeure where the failure of the permitting authority to act is beyond the control of Respondent and Respondent has taken all steps available to it to obtain the necessary permit, including but not limited to: submitting a complete permit application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions.

B. Respondent shall notify DNREC, in writing, within twenty (20) days after it becomes or should have become aware of any event which causes or may cause a delay in complying with any requirement of this Consent Order or prevents compliance in the

manner required by this Consent Order and any event which Respondent claims constitutes a force majeure. Such notice shall include an estimate of the anticipated length of delay, including necessary demobilization and remobilization, its cause, measures taken or to be taken to prevent or minimize the delay, and an estimated timetable for implementation of these measures, the threat or potential threat to human health or the environment caused by the delay or disruption, and if Respondent asserts that the event is a force majeure, the facts and reasoning supporting the assertion. Failure to comply with the notice provisions of this Section shall constitute a waiver of Respondent's rights to assert a force majeure claim with respect to such event. I n addition to the above notification requirements, Respondent shall undertake all reasonable actions to prevent or minimize any delay in achieving compliance with any requirement of this Consent Order after it becomes or reasonably should have become aware of any event which may delay such compliance.

C. If DNREC determines that the failure to comply or delay has been or will be caused by a force majeure, the time for performance of that requirement of this Consent Order may be extended, upon DNREC approval, for a period equal to the delay resulting from such force majeure. This shall be accomplished through an amendment to this Consent Order pursuant to Section XX ("SUBSEQUENT MODIFICATION"). Such extension shall not alter the schedule for performance or completion of any other tasks required by this Consent Order, unless these tasks are also specifically altered by amendment of this Consent Order. In the event that DNREC and Respondent cannot agree that any delay or failure has been or will be caused by a force majeure, or if there is no agreement on the length of the extension, Respondent may invoke the dispute resolution procedures set forth in Section XIV.

XVI. RESERVATION OF RIGHTS

A. DNREC hereby reserves all of its statutory and regulatory powers, authorities, rights and remedies, both legal and equitable, including any which may pertain to Respondent's failure to comply with any of the requirements of this Consent Order, including, without limitation, the assessment of penalties under 7 Del. C. § 6309. This Consent Order shall not be construed as a covenant not to sue, or as a release, waiver or limitation of any rights, remedies, powers, and/or authorities, civil or criminal, which DNREC has under RCRA or any other applicable statutory, regulatory, or common law authority of the United States, except as specifically set forth herein.

B. Compliance by Respondent with the terms of this Consent Order shall not relieve Respondent of its obligations to comply with other requirements of RCRA or any other applicable federal, state, or local laws and regulations.

C. The execution of this Consent Order and Respondent's consent to comply shall not limit or otherwise preclude DNREC from taking additional enforcement action pursuant to 7 Del. C. § 6309, or any other authority, should DNREC determine that such action is warranted.

D. This Consent Order is not intended to be, nor shall it be construed as, a permit. This Consent Order does not relieve Respondent of any obligation(s) to obtain and comply with any federal, state, or local permits.

E. DNREC reserves the right to perform any portion of the work consented to herein or to conduct any additional site characterization, feasibility study, and/or response/corrective actions it deems necessary to protect public health and/or welfare and/or the environment. DN REC may exercise its authority under RCRA or any other applicable authority to undertake or require the performance of response actions at any time. DNREC reserves the right to seek reimbursement from Respondent for costs incurred by the State of Delaware in connection with any such response actions. Notwithstanding compliance with the terms of this Consent Order, Respondent is not released from liability, if any, for the costs of any response actions taken by DNREC.

F. If DNREC determines that Respondent's activities, whether or not in compliance with this Consent Order, have caused or may cause a release or threatened release of hazardous wastes, hazardous constituents, hazardous substances, pollutants, or contaminants, which threaten or may pose a threat to human health and/or the environment, DNREC may direct Respondent to stop further implementation of this Consent Order for such period of time as may be needed to abate any such release or threatened release and/or undertake any action which DNREC determines is necessary to abate such release or threatened release.

XVII. OTHER CLAIMS

Nothing in this Consent Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, corporation, or other entity for any liability it may have arising out of, or relating in any way, to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous constituents, hazardous substances, hazardous wastes, pollutants, or contaminants found at, taken to, or taken from the Facility.

XVIII. INDEMNIFICATION OF THE STATE OF DELAWARE

Respondent agrees to indemnify and save and hold harmless the State of Delaware, its officials, agencies, departments, agents, employees, contractors, subcontractors and representatives, from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondent or its officers, directors, employees, agents, independent contractors, receivers, trustees, and assigns in carrying out activities required by this Consent Order. Notwithstanding the foregoing, Respondent shall not be responsible for indemnifying the State of Delaware or any other person for claims or causes of action arising from or on account of acts or omissions of the State or such person. This indemnification shall not be construed in any way as affecting or limiting the rights or obligations of Respondent or the State of Delaware under their various contracts.

XIX. NOTICE OF NON-LIABILITY OF DNREC

Neither the State of Delaware nor DNREC shall be deemed a party to any contract involving Respondent and relating to activities at the Facility; nor shall the State of Delaware or DNREC be held liable for any claims or causes of action arising from or on account of any act, or omission of Respondent, its officers, employees, contractors, subcontractors, receivers, trustees, agents, or assigns, in carrying out the activities required by this Consent Order.

XX. SUBSEQUENT MODIFICATION

A. This Consent Order may be amended in writing by mutual agreement of DNREC and Respondent. Any such amendment shall be in writing, shall be signed by all Parties, shall have as its effective date the date on which it is signed by DNREC, and shall be incorporated into this Consent Order by reference.

B. Minor modifications in the studies, techniques, procedures, designs, or schedules utilized in carrying out this Consent Order and necessary for the completion of the project may be made by written agreement of the Project Coordinators. Such modifications shall have as an effective date the date on which the agreement is signed by DNREC. In emergency situations, minor modifications may be agreed to by oral agreement of the Project Coordinators, subject to written confirmation by the Project Coordinators within seven (7) days of such oral agreement.

C. No informal advice, guidance, suggestions, or comments by DNREC regarding reports, plans, specifications, schedules, and other writings submitted by Respondent shall be construed as relieving Respondent of its obligation(s) to obtain written approval if and when required by this Consent Order.

XXI. SEVERABILITY

If any provision or authority of this Consent Order or the application of this Consent Order to any party or circumstance is held by any judicial or administrative authority to be invalid, the application of such provision to other parties or circumstances and the remainder of this Consent Order shall not be affected thereby and shall remain in full force.

XXII. TERMINATION AND SATISFACTION

The provisions of this Consent Order shall be deemed satisfied upon Respondent's receipt of written notice from DNREC that Respondent has demonstrated to the satisfaction of DNREC, that the terms of this Consent Order, including any additional tasks determined by DNREC to be required pursuant to this Consent Order, have been satisfactorily completed and a Certification of Completion has been issued in accordance with Section VI.C. This notice shall not, however, terminate Respondent's obligations to comply with the continuing obligations under Sections XI ("RECORD PRESERVATION"), XVI ("RESERVATION OF RIGHTS"), XVII ("OTHER CLAIMS"), XVIII ("INDEMNIFICATION OF THE STATE OF DELAWARE"), XIX ("NOTICE OF NON-LIABILITY OF DNREC"), and XXIII ("ATTORNEYS' FEES").

XXIII. ATTORNEYS' FEES

The Respondent shall bear its own costs and attorneys' fees.

XXIV. PUBLIC COMMENT ON THIS AOC

Within thirty (30) days of the date that DNREC signs this Consent Order, DNREC shall announce the availability of this Order to the public for review and comment.

DNREC shall accept comments from the public for a period of thirty (30) days after such announcement. At the end of the comment period, DNREC shall review all comments received during the above-described thirty (30)-day period and shall either:

A. Determine that the Consent Order should be made effective in its present form in which case DNREC shall so notify Respondent in writing and send Respondent a copy of this Order executed by DNREC. The Consent Order shall become effective on the date of the receipt of such notice and a true and correct copy of the Consent Order as provided in Section XXV herein; or

B. Determine that modification of the Consent Order is necessary, in which case DNREC shall notify Respondent in writing as to the nature of all required changes. If Respondent agrees to the modifications, the Consent Order shall be so modified and shall become effective upon the receipt by Respondent of an executed true and correct copy of the modified Consent Order as provided in Section XXV herein.

In the event that the parties are unable to agree on modifications required by DNREC as a result of public comment, this Consent Order shall be withdrawn by DNREC. In such an event, DNREC reserves the right to take such action as may be necessary to protect public health and/or and the environment.

XXV. EFFECTIVE DATE

The effective date of this Consent Order shall be the date on which a fully executed, true and correct copy of this Consent Order is received by Respondent. Because this Order was entered with the consent of all Parties, Respondent waives its rights to request a public hearing pursuant to Section of the 124 of the DRGHW and 7 Del. C. Sections 6004, 6006, and 6312.

The individual representatives of DNREC and Respondent executing this Consent Order hereby certify that they have the authority to bind their respective entities to the applicable provisions of this Consent Order.

SIGNATURE PAGE FOLLOWS

IT IS SO AGREED AND ORDERED:

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL

DATE: 6/28/14

BY: _____
Name: David Small
Title: Secretary

E.I. DUPONT DE NEMOURS AND COMPANY

DATE: 9/9/14

BY: _____
Name: Tom A. Ei
Title: Remediation Team Manager

DuPont Seaford HW
File: 28-D

ATTACHMENT A

FILE COPY

STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

RECORD OF DECISION
Final Decision and Response to Comments

UNDER THE AUTHORITY OF THE
DELAWARE REGULATIONS GOVERNING HAZARDOUS WASTE
AND TITLE 7 OF THE DELAWARE CODE

IN ACCORDANCE WITH THE
RESOURCE CONSERVATION AND RECOVERY ACT

FACILITY:	E.I. du Pont de Nemours and Company, Inc. DuPont Seaford Nylon Plant
EPA ID NUMBER:	DED002348845
ADDRESS:	400 Woodland Road, Seaford, DE 19973

PURPOSE:

This Final Decision and Response to Comments is issued by the State of Delaware Department of Natural Resources and Environmental Control (DNREC) in accordance with the Resource Conservation and Recovery Act (RCRA) under the authority of the *Delaware Regulations Governing Hazardous Waste* (DRGHW) and Title 7 of the Delaware Code, Chapters 60 and 63. DNREC has used the administrative procedures found in Section 124 of the DRGHW to provide public notice and solicit comment on DNREC's proposed remedy.

INTRODUCTION:

The RCRA Corrective Action activities performed to date at the DuPont Seaford Nylon Plant in Seaford, Delaware, were conducted pursuant to an Administrative Order of Consent entered into

by the United States Environmental Protection Agency (EPA) and DuPont on February 25, 1992, Docket Number RCRA-III-051-CA, pursuant to Section 3008(h) of RCRA, as amended, 42 U.S.C. Section 6928(h). On September 11, 2000, the EPA granted the State of Delaware the authority to administer the corrective action program, pursuant to Section 3008(h) of RCRA, 42 U.S.C. Section 6938(h) in lieu of the Federal program. DNREC then took over the oversight and implementation of the corrective action activities at the DuPont Seaford Nylon Plant.

In April 2006, the "Statement of Basis" for the proposed corrective measures at the DuPont Seaford site was issued and is incorporated herein and made part of hereof. The "Statement of Basis" described site conditions, completed investigations and clean-up actions, and the proposed remedy selection. This Record of Decision, Final Decision and Response to Comments, presents DNREC's final decision on the remedy and response to comments regarding clean-up at the DuPont Seaford facility.

SELECTED REMEDY:

DNREC has selected a final remedy for the DuPont Seaford Nylon Plant consistent with DNREC's proposed remedy described in the "Statement of Basis". For a more detailed description of the facility, previous investigations, and the selected remedy, please refer to the "Statement of Basis" document.

In brief, DNREC's selected remedy at the DuPont Seaford facility consists of:

- SWMU-1: DuPont will include well L-6D in an annual groundwater monitoring program to continually evaluate the natural attenuation processes for carbon tetrachloride (CCl_4) to ensure that the plume is degrading in the environment (i.e. reducing in volume).

  DuPont will submit these results to DNREC in the annual Sampling, Analysis, Monitoring, and Reporting (SAMR) Project Report. This annual report will also include an evaluation of remedy effectiveness and/or recommendations for additional corrective measures.

  In addition, a groundwater management zone (GMZ) will encompass the entire CCl_4 plume. The GMZ will prohibit groundwater withdrawal from this area except for environmental monitoring purposes.

- SWMU-7/12/13: DuPont will implement a long-term monitoring program to continually evaluate the attenuation processes for arsenic (As) in this area to ensure that the plume remains stable and is not migrating. This monitoring program will consist of surface water sampling, groundwater sampling, and water level measurements near the arsenic plume. DuPont will include existing wells MW-6, MW-8A, 12MW-14S, 12MW-14D, 12MW-15S, 12MW-16S, 17MW-17S, PW-11, PW-12, SG-2, SG-4, and Outfall #2 in this program, as well as install and include additional wells 7MW-18S, 7MW-19S, and 7MW-20S.

  DuPont will submit these results to DNREC in the annual Sampling, Analysis, Monitoring, and Reporting (SAMR) Project Report. This annual report will also include an evaluation of remedy effectiveness and/or recommendations for additional corrective measures.

In addition, a groundwater management zone (GMZ) will encompass the entire arsenic plume and extend even slightly beyond the contaminant area. The GMZ will prohibit withdrawal of groundwater in this area except for environmental monitoring purposes.

- SWMU-13/16/17: DuPont will implement a protective soil cover, consisting of clean fill, topsoil, and grass seedling, which is approximately 6-inches thick over the exposed debris (i.e. concrete, brick, wood, etc) along this area. DuPont will also establish a permanent vegetative cover to prevent potential physical hazards.

If for any reason, the remedies described above prove to be ineffective, DNREC reserves the right to re-evaluate the selected remedies.

PUBLIC PARTICIPATION:

On April 16, 2006, the DNREC placed an announcement in local newspapers, The News Journal and the Delaware State News, to notify the public of DNREC's proposed remedy for the DuPont Seaford facility and of the availability of the Administrative Record. The entire Administrative Record, including the "Statement of Basis" describing the proposed remedy was available for review by the public at the DNREC office in Dover, Delaware. Additional copies of the "Statement of Basis" were also available at the DNREC office in Georgetown, Delaware and electronic copies were posted on the DNREC website.

The public comment period on the proposed remedy lasted thirty (30) calendar days from April 16, 2006 to May 15, 2006.

RESPONSE TO COMMENTS:

During the public comment period, DNREC received three (3) comments from INVISTA S.a.r.l., the current owner and operator of the DuPont Seaford Nylon Plant, via a letter, dated May 11, 2006. DNREC did not receive any requests for a public meeting or public hearing during this period.

DNREC has summarized these comments below, along with each response:

In the first comment, INVISTA stated that they support the placement of Groundwater Management Zones (GMZs) for SWMU-1 and SWMU-7/12/13 as institutional controls. In previous conversations, INVISTA had expressed concern that the GMZs might affect their ability to withdraw groundwater from their existing production wells. DNREC provided clarification in a letter, dated March 30, 2006, which explains that the proposed GMZs would not affect INVISTA's current network of wells. In response to this comment, DNREC confirms that INVISTA's interpretation of the GMZs is true --- the GMZs will not place any restrictions on the current permitted uses of their existing well network nor affect the placement of new wells outside of the GMZ boundary.

INVISTA's second comment provided clarification that production wells PW-9, PW-10, PW-11, and PW-12 and the Team Center Well are used by INVISTA to supply potable and non-potable water to the facility. These wells are located outside the areas of contamination and the selected GMZs (INVISTA also monitors production wells PW-11 and PW-12 under solid waste permit SW-98/01). In response to this comment, DNREC confirms that DNREC is restricting the installation and use of drinking water wells at the facility within the areas specifically designated as GMZs only.

In INVISTA's third and final comment, INVISTA stated that they would like the additional arsenic delineation (i.e. proposed wells 7MW-18S, 7MW-19S, and 7MW-20S) completed before selection of the final remedial alternative for SWMU-7/12/13. INVISTA also requests that DuPont install, develop, and sample these additional wells as soon as possible, prior to final remedy selection. While DNREC agrees that INVISTA is correct in stating that the standard regulatory approach for the corrective action process is to complete the investigation before remedy implementation, in this case, DNREC believes that the proposed remedy of long-term monitoring is an appropriate risk-based corrective action and that the remedy is adequate regardless of the new wells and that any further investigation would only prolong implementation of the remedy. DNREC has completely defined the arsenic plume and groundwater monitoring continues to show that the plume is stable. These additional monitoring wells will provide a more complete picture of the overall groundwater quality of this area and further support the data from the investigations, which show that the arsenic plume is stable and under control. Therefore, in response to this comment, DNREC has decided to move forward with the proposed remedy of long-term monitoring and institutional controls for SWMU-7/12/13. DNREC encourages DuPont to install wells 7MW-18S, 7MW-19S, and 7MW-20S as quickly as possible and commence with the sampling program prior to DNREC's issuance of the Corrective Measure Implementation (CMI) Order.

DECLARATION:

Based on the Administrative Record compiled for the corrective action at the DuPont Seaford Nylon Plant, I have determined that the remedy selected is protective of human health and the environment.

Nancy C. Marker
Environmental Program Manager II
Solid and Hazardous Waste Management Branch

5/25/06
Date

NCM:RCL:dld
Waste Facilities\DuPont Seaford\ Statement of Basis/RCL06027

ATTACHMENT B

SAMPLING, ANALYSIS, MONITORING AND REPORTING PROGRAM WORK PLAN

SEAFORD NYLON PLANT
SEAFORD, DELAWARE

August 2014

Prepared by:

PARSONS
1013 Centre Road
Wilmington, Delaware 19810

This page intentionally left blank

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

ACRONYMS

Acronym	Definition / Description
DuPont	E. I. du Pont de Nemours and Company
AOC	Administrative Order on Consent
CC14	Carbon tetrachloride
CMS	Corrective Measures Study
DNREC	(Delaware) Department of Natural Resources and Environmental Control
EC	Environmental Covenant
GMZ	Groundwater Management Zone
IC	Institutional control
LCS	Laboratory control spike
LCSD	Laboratory control spike duplicate
µg/L	Microgram(s) per liter
µm	Micron
MCL	Maximum contaminant level
mg/L	Milligram(s) per liter
MNA	Monitored natural attenuation
MOA	Memorandum of Agreement
MS	Matrix spike
MSD	Matrix spike duplicate
OSHA	Occupational Safety and Health Administration
QA/QC	Quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
ROD	Record of Decision
SAMR	Sampling, analysis, monitoring and reporting (program)
SB	Statement of Basis
SHWMB	(DNREC) Solid & Hazardous Waste Management Branch
SWMU	Solid waste management unit
USEPA	U.S. Environmental Protection Agency

This page intentionally left blank

1.0 INTRODUCTION AND BACKGROUND

1.1 Introduction

The Sampling, Analysis, Monitoring, and Reporting (SAMR) Program Work Plan (SAMR Work Plan) defines the long-term monitoring portion of the RCRA[1] Corrective Action program for the real property located at 25876 DuPont Road in Seaford, Delaware, on which the nylon textile manufacturing plant (herein collectively referred to as the Site). An Annual SAMR Project Report is due to the Delaware Department of Natural Resources and Environmental Control (DNREC) on or before July 1, and a Corrective Measures Five-Year Assessment Report is due every fifth year, again no later than July 1. Each Annual SAMR Project Report will include an evaluation of remedy effectiveness and recommendations for any additional corrective measures. The Corrective Measures Five-Year Assessment Report will serve as the annual summary report in the year that it is submitted and will also include an evaluation of remedy effectiveness and recommendations for any additional corrective measures.

1.2 Background

The RCRA Corrective Action activities performed at the Site to date were commenced pursuant to an Administrative Order on Consent (AOC Order) entered into by the U.S. Environmental Protection Agency (USEPA) and E. I. du Pont de Nemours and Company (DuPont) on February 25, 1992 (Docket Number RCRA-III-051-CA). The AOC Order was entered into pursuant to Section 3008(h) of RCRA, as amended, 42 United States Code Section 6928(h), and required DuPont to complete Interim Measures, a RCRA Facility Investigation (RFI), and a Corrective Measures Study (CMS).

1.2.1 Solid Waste Management Units

The solid waste management units (SWMUs) identified during the RFI activities were evaluated as part of the RCRA Corrective Action process and/or as part of other investigations to determine whether the units released contaminants to the environment. The DNREC issued a Statement of Basis (SB) and a Record of Decision (ROD) in 2006 documenting that the investigations were complete with three exceptions. Further corrective measures were needed at SWMU-1 (Solid Waste Landfill A), SWMU-7/12/13 (Utility Ash Settling Ponds/Retention Ponds/Solid Waste Landfill C), and SWMU-13/16/17 (Solid Waste Landfill C/Trade Waste Retention Pond/Coal Ash Landfill). Portions of SWMU 13/16/17 are overlain by an ash landfill, currently undergoing closure procedures, and regulated under a Delaware Solid Waste Industrial (Ash) Landfill Closure and Post Closure Care Permit (SW-09/01). USEPA Region 3 determined in a letter dated January 16, 2007, that DuPont had satisfactorily completed the RFI/CMS Order and terminated the Order. DuPont completed the Corrective Measures required by the ROD in 2007.

DNREC and DuPont entered into an Environmental Covenant (EC) in 2009 that established land use restrictions on certain portions of the property including groundwater management zones (GMZs). The EC was amended in 2014.

In a letter from Mr. Bryan Ashby of DNREC's Solid & Hazardous Waste Management Branch (SHWMB) to DuPont dated June 3, 2010, DNREC confirmed "that the remediation work required under the CMS and ROD has been implemented and the site

[1] RCRA – Resource Conservation and Recovery Act

is designated as Complete with Controls" with the remaining controls being monitoring and maintenance of the remedy enacted per the ROD. This SAMR Work Plan defines the monitoring and maintenance activities required by the ROD.

A chronology of key documents and reports is posted at:
http://www.epa.gov/reg3wcmd/ca/de/pdf/ded002348845.pdf

1.2.2 Institutional Controls

The institutional controls (ICs) for SWMU-1, SWMU-7/12/13, and SWMU-13/16/17 are comprised of the land use restrictions documented in the EC, which include digging restrictions. The EC also includes an internal 2008 DNREC Memorandum of Agreement (MOA) that discusses the Groundwater Management Zones (GMZs) that prohibit withdrawal of groundwater from within the GMZ boundaries except for environmental monitoring purposes.

1.3 Work Plan Organization

In addition to this introductory section, the work plan is presented in five sections, as follows.

- Section 2 describes the status of each SWMU in the program and action levels associated with them.
- Section 3 describes the locations and frequency, procedures (sampling and water level measurements), and analyses for ground- and surface water sampling. It also describes the measurement of water levels and waste management procedures.
- Section 4 describes the quality assurance/quality control (QA/QC) program that will be employed to assure the precision, accuracy, completeness, and appropriateness of the sampling and analytical program.
- Section 5 describes the deliverables associated with the SAMR, including project reporting and procedures for taking corrective action, should it be necessary.
- Section 6 describes the health and safety program associated with the SAMR.

2.0 SWMU STATUS AND ACTION LEVELS

SWMU-1: Monitored natural attenuation (MNA) with institutional controls was selected as the remedy for the carbon tetrachloride (CCl4) groundwater contamination in SWMU-1. The concentration of CCl4 was documented to be <0.5 micrograms per liter (µg/L) for three consecutive sampling periods, and DNREC approved no further groundwater sampling for this SWMU in a letter dated October 5, 2010. Therefore, groundwater samples will not be collected at SWMU-1 as part of this SAMR Work Plan. However, SWMU-1 is covered by the ICs (i.e., GMZ and Land Use Restrictions) established by the EC.

SWMU-7/12/13: MNA with ICs was selected as the remedy for the arsenic groundwater plume in this area. Monitoring includes collecting surface water and groundwater samples for laboratory and field analyses and water level measurements as described in Section 3. Aspects of the EC affect this area.

SWMU 13/16/17: Based on information collected during the RCRA Corrective Action process, DNREC concluded in its SB that no contaminant hazards existed in this area. Work required by the SB and ROD included placement of a soil cover over physical hazards. This work is complete as set forth in a DNREC letter to DuPont dated June 3, 2010..

Remedial activities at SWMU-1 (CCl4 <0.5 µg/L for three sampling periods) and SWMU-13/16/17 (placement of soil cover with vegetative cover) are complete with controls. Therefore, the primary goal of the SAMR Work Plan is to monitor concentrations of arsenic in groundwater and surface water at and near SWMU-7/12/13 to confirm that the MNA approach remains effective and the groundwater plume remains stable. The Site-Specific Action Level for dissolved arsenic in groundwater is 69,680 µg/L (Appendix B of the Corrective Measures Study).

This page intentionally left blank

3.0 SAMPLING, MONITORING AND INSPECTIONS

3.1 Sampling Locations and Frequency

The approved CMS and ROD include requirements for a groundwater and surface water monitoring program. The monitoring program commenced with annual surface water and groundwater sampling and water level measurements in 2007 and has been completed annually with the submission and subsequent approval of the 1st Annual (2007) through 7th Annual (2013) monitoring reports. The program has evolved through the years to respond to monitoring results and changes at the facility. For example, sampling of well L-6D in SWMU-1 was discontinued after CCl4 results had been below the maximum concentration level (MCL) for three consecutive monitoring rounds. Monitoring changes for SWMU-7/12/13 were also approved (12/17/2012) as a result of pond closures and well abandonments.

This section presents the monitoring program that will be instituted upon the approval of this document. Figure 1 identifies the locations of SWMUs and monitoring points. Table 1 summarizes the groundwater and surface water locations and constituents included in the monitoring program. Field activities will be logged on a copy of the form provided in Appendix A. Groundwater and surface water samples and water level measurements will be collected annually in the fourth quarter of each calendar year, so that the Annual SAMR Project Reports can be submitted by July 1 of the following year. The timing of the sampling and collection of water level measurements may be adjusted by submitting written notice to DNREC.

3.2 Sampling Procedures

The following procedures will be used to collect groundwater and surface water samples for analysis at a certified laboratory:

- Samples will be filtered in the field for dissolved arsenic using a 0.45-micron (µm) filter cartridge before being placed in laboratory-prepared sample bottles. The filter will be attached to the pump discharge using clean, dedicated silicone tubing for each sampling location. The bottles will be filled directly from the filter discharge port. The contract laboratory will provide all required new, pre-preserved sample containers.
- Samples will be logged onto a chain-of-custody form that is provided by the laboratory or consultant. The original custody record will be submitted to the laboratory with the samples, and a completed copy will be included in the laboratory report and maintained in the project file with the analytical results.
- Samples will be packed in a cooler with wet ice and shipped to the laboratory via laboratory courier or overnight transport. Coolers will be secured with a custody seal, and the samples will be maintained at a temperature at or below 4 degrees Celsius.

In keeping with standard surface water risk assessment practices, both total and dissolved surface water samples will be taken. Field instruments will be calibrated prior to sampling in accordance with manufacturer instructions and applicable standard operating procedures.

3.3 Groundwater Sampling

Production wells will be sampled from a port that is located on the well head.

Each well will be purged using a low-flow (minimum drawdown) protocol before any samples are collected. The low-flow peristaltic pump will be used to evacuate the groundwater from the screened area of the well. Purging will be considered complete when the field parameters have stabilized or three to five volumes of standing water in the well casing have been evacuated, whichever occurs first. Stabilization will be considered achieved when three consecutive readings, taken at 3- to 5-minute intervals are within the following limits:

- Dissolved oxygen (10 percent);
- Specific conductance (3 percent);
- Temperature (3 percent); and
- pH (±0.1 standard unit).

Field analysis will be performed using a flow-through cell once the water level in the well has stabilized. The field technician will collect samples in laboratory-supplied bottles by disconnecting the flow cell and collecting water directly from the pump discharge. Dissolved arsenic samples will be transferred into the laboratory-prepared sample bottle with preservative after passing through a 0.45-µm filter. A new disposable filter unit will be utilized for each sampling location.

Groundwater samples will be drawn from each monitoring well using a peristaltic pump. Clean polypropylene or polyethylene tubing will be used in each well during each sampling event. The tube will be placed such that the pump intakes are positioned within the midpoint of the screened interval. The pump will be decontaminated between wells.

A graduated cylinder and a stopwatch will be used to measure the pumping rate.

3.4 Surface Water Sampling

Surface water samples will also be collected using a peristaltic pump. The tubing connected to the pump intake will be placed into the surface water at the desired sampling location. New tubing will be used for each sampling location. Samples requiring filtration will then be filtered in the field through a 0.45-µm filter unit and placed into the sample container supplied by the laboratory. The filter will be attached to the pump discharge using new, dedicated silicone tubing for each sampling location. The bottles will be filled directly from the filter discharge port. A new disposable filter unit will be utilized for each sampling location.

3.5 Water Level Measurements

The water level in each well will be measured using an electronic water level meter capable of measuring to 0.01-foot accuracy. The water levels will be measured from the top of the well casing.

3.6 Sample Analysis

Groundwater and surface water samples will be analyzed by a lab or in the field for the parameters shown in the table below. Lab analyses will be performed by a lab that holds

a current Delaware Office of Drinking Water approval and is included in the current DNREC list of approved laboratories for Hazardous Substance Cleanup Act programs.

Laboratory and Field Analyses

Certified Laboratory Analysis	Field Analysis
pH (SM 4500 H/B)	pH
Specific Conductance (SM20 2510 B)	Specific Conductance
Total Dissolved Solids (SM20 2540 C)	Dissolved Oxygen
Alkalinity as $CaCO_3$ to pH 4.5 and 8.3 (SM20 2320 B)	Odor
Sulfate (EPA 375.4)	Color
Dissolved Arsenic (SW-846 6020) - GW and SW Total Arsenic (SW-846 6020) - GW and SW	Oxidation-Reduction Potential
Phosphorus, total as PO4 (EPA 365.1)	Temperature
Hardness as $CaCO_3$ (SM20 2340 C)	Turbidity

The field analysis parameters listed in the table above (other than odor and color) will be collected using a YSI 6920 Water Quality Meter. Section 3.3 describes the method in greater detail.

3.7 Waste Management

Purged groundwater and decontamination water generated during monitoring well sampling activities will be collected in a 55-gallon drum that will be sealed after collection. All disposable sampling equipment such as filters and tubing will be placed in a 5-gallon bucket that will also be sealed. The drum and bucket will then be placed in a designated waste accumulation area. A waste tracking log will be maintained for all waste generated during each sampling event. When the well sampling is complete, a composite sample of the purged water will be collected from the drum for arsenic analysis. The drum and bucket will be labeled to reflect the pending analysis. If the sample analysis result for the composite sample is less than 5 milligrams per liter (mg/L), the purge water is nonhazardous, and the water will be disposed of in the Site's wastewater treatment facility. The bucket of sampling equipment will be disposed of in an on-site industrial dumpster. A concentration greater than 5 mg/L will indicate that the purge water is hazardous. If so, the consultant will work with a representative of the responsible party to provide all information necessary to properly manifest the generated hazardous waste. The drum and bucket will then be labeled as hazardous waste and transported off-site for disposal at an approved facility.

3.8 Inspections and Maintenance

The inspection and maintenance activities associated with SWMU-13/16/17 will be completed as needed with a minimum frequency of at least once per calendar year, as follows:

- The vegetative cover will be inspected to characterize the general condition and identify areas not covered with vegetation or where the vegetation is stressed.

- The covered area will be inspected for evidence of trespass or vandalism, burrowing animals, cracking, desiccation, erosion, subsidence, or other damage or structural changes.
- Each inspection will be documented on an Inspection and Maintenance Form.
- Repairs to any damaged and/or eroded protective cover will be initiated as soon as possible, but no later than 24 hours after discovery. All repairs and maintenance activities (including type, remedy, and completion date) will be documented on the Inspection and Maintenance Form.
- All exposed debris discovered during repair and/or maintenance activities, that can be manually removed, will be removed and disposed of in accordance with Delaware's *Regulations Governing Hazardous Waste* or *Regulations Governing Solid Waste*, as applicable, prior to repairing the SWMU's cover. If debris is discovered during repair and/or maintenance activities that cannot be manually removed, a minimum of six (6) inches of protective cover, consisting of clean fill, topsoil and grass seeding, will be applied and maintained on that area.

4.0 QUALITY ASSURANCE / QUALITY CONTROL

The laboratory will provide analytical results in a report pdf and electronic deliverable data (EDD) file. All analytical results will have been reviewed at the bench and unit levels, and authorized by the laboratory Quality Assurance (QA) Officer (or designee). The data will also be checked for accuracy and completeness and tabulated upon receipt by the QA Officer for the Site or the designated consultant. The following section describes the QA and quality control (QC) functions in greater detail.

4.1 Precision

Precision is defined as the agreement between numeric values for two of more measurements that have been made in an identical fashion. The laboratory's objective for precision is to equal or exceed the guidelines of the analytical methods, as applicable, and to comply with in-house precision criteria. The laboratory routinely monitors precision for each of the methods by means of relative percent difference measurements for laboratory control spikes (LCSs) versus laboratory control spike duplicates (LCSDs), matrix spike (MS) versus matrix spike duplicate (MSD) samples, or samples and sample duplicates (DUP) in each analytical batch. The QA Officer will also evaluate field sampling precision in field duplicate samples.

4.2 Accuracy

Accuracy is the degree of agreement of a measurement with an accepted true value. The accuracy check consists of the following:

- The date analyzed/date sampled in the laboratory report are checked to see whether they match the EDD. Analytical holding times are also verified and compared with USEPA guidance for the applicable methods.
- The reported detection limits/dilution factors on the laboratory report are reviewed to ensure that they match the EDD.
- The reported results are reviewed for all analytes on the laboratory report to ensure that they match the EDD.
- The MS and LCS recoveries for the sample set are compared to the laboratory acceptance criteria, and the associated blank samples (field and/or laboratory) are examined for comparison with detections of target analytes in field samples.

4.3 Completeness

Completeness is a measure of the amount of valid data obtained from the measurement system compared with the amount that was expected under normal conditions. Analytical data for a given project or sampling effort are reviewed for completeness by the QA Officer. The definition of completeness consists of the following.

- Checking that the collected field samples were analyzed by the correct analytical method as stated in the project specifications;
- Checking that the required analytes for each collected field sample were reported by the laboratory for a given analytical method;
- Checking that the appropriate preparation method was performed for the requested analytical method; and

- Reviewing the analytical data to ensure that the analytical method required holding time was achieved.

4.4 Batch Integrity

The QA Officer reviews the batch QC for all of the analytical methods used for a given project. The batch process is per SW-846 guidance. For MS/MSD samples collected in the field at a rate of 1 per 20 field samples, the laboratory will have an MS/MSD to incorporate into each an alytical batch.

The QA Officer will review the analytical data on a batch basis to ensure that the minimum necessary QC samples (method blank [MB], LCS, LCSD, MS, MSD, or DUP) were performed for every batch of 20 or fewer field samples in a given project. The purpose of this review is to assure that the accuracy and precision data are associated with every batch of samples for a given analytical method. A batch equals 20 or fewer field samples that have associated precision and accuracy QC data including MB, LCS, LCSD, MS, MSD, and DUP.

4.5 Appropriateness

Appropriateness considers the usability of the data for the project, given the results of precision and accuracy measurements and batch QC review. The batch QC data are reviewed by the QA Officer to determine if the accuracy and precision measurements associated with every 20 field samples are within the prescribed QC limits. All batch QC sample comments made by the laboratory are also reviewed for their appropriateness for a given accuracy or precision QC measurement that is not within the designated limits.

If batch QC is not within the prescribed limits or is incomplete, it is typically noted in the QC section or case narrative of the laboratory report.

The reported practical quantitation and method detection limits are also reviewed by the QA Officer and compared against project specifications.

Data usability qualifiers (U, J, UJ, B, R) are applied to the dataset as necessary, and a QA Summary is prepared by the QA Officer to identify any particular data quality or usability issues specific to the sample set. All final electronic data are stored in a secure database.

5.0 SAMR PROJECT DELIVERABLES

5.1 SAMR Project Reporting to DNREC

Sampling results and observations will be evaluated and summarized in an Annual SAMR Project Report that will be submitted to DNREC-SHWMB no later than July 1st each year. Every fifth year, DNREC will be provided a Corrective Measures Five-Year Assessment Report no later than July 1st. The Corrective Measures Five-Year Assessment Report will also serve as the annual summary report in the year that it is submitted.

5.2 Corrective Action Plan

If dissolved arsenic concentrations in groundwater samples from any groundwater monitoring well in the SAMR program exceed the Site-Specific Action Level for groundwater set forth in Section 2.0of this SAMR Work Plan, then DNREC will be notified in writing within 7 days of receipt of the validated laboratory results. The well(s) in question will be resampled within 30 days of receiving the validated laboratory results, and DNREC will be notified in writing within 7 days of receipt of the resampling validated laboratory results. The analytical results for this second sample will also be sent to DNREC. If the second dissolved arsenic analytical result is less than the Site-Specific Action Level for groundwater set forth in Section 2.0, no further action will be required. If the second dissolved arsenic analytical result exceeds the Site-Specific Action Level for groundwater set forth in Section 2.0, then the need to re-evaluate the MNA remedy and/or develop a corrective action plan will be considered.

This page intentionally left blank

6.0 HEALTH AND SAFETY

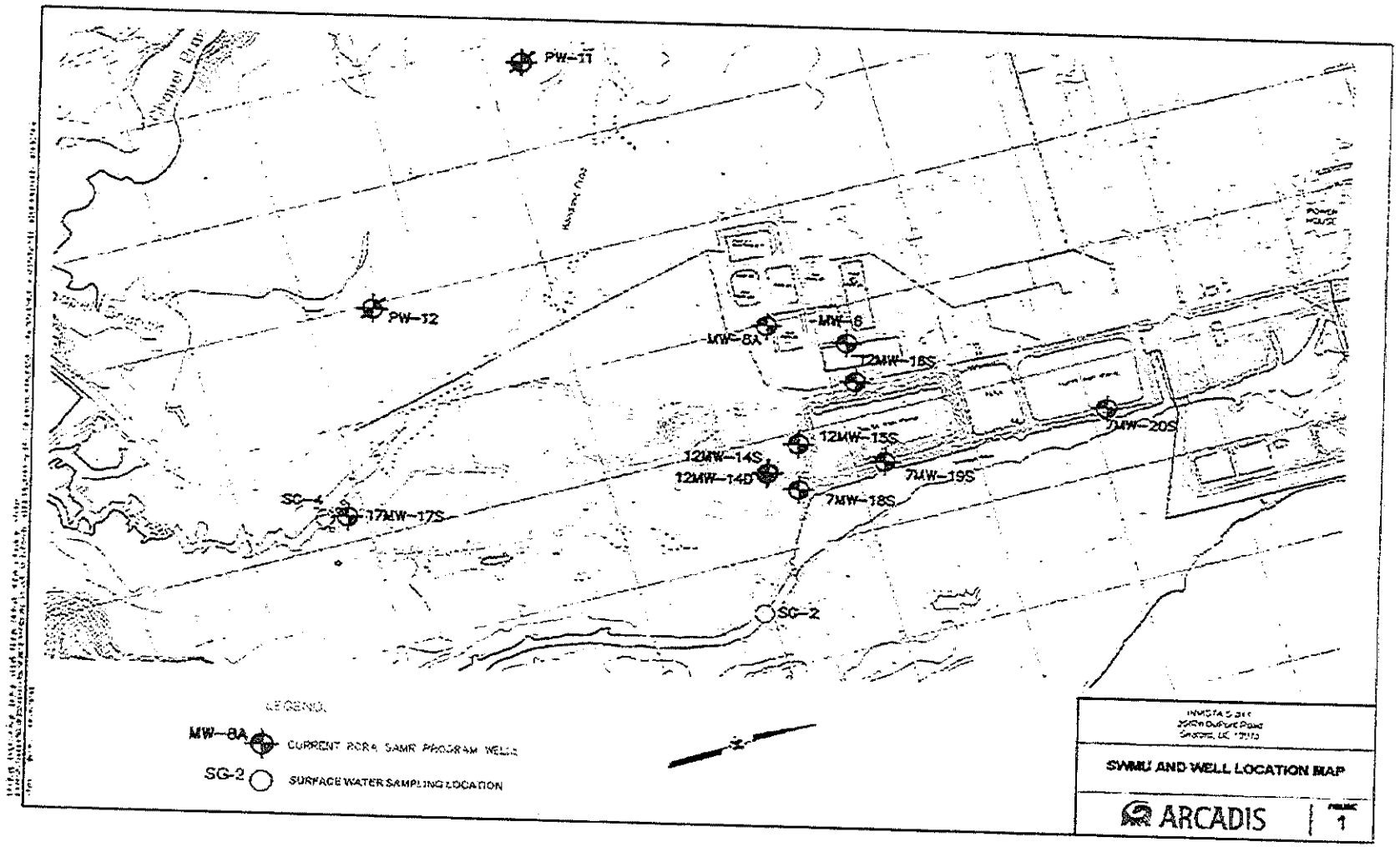
Personnel performing on-site fieldwork will be trained in accordance with 29 Code of Federal Regulations Part 1910.120(e)(8) Hazardous Waste Operations and Emergency Response, as mandated by the Occupational Safety and Health Administration (OSHA). In addition to OSHA training, personnel will also be trained in:

- Plant rules and procedures
- Plant Safety (e.g., protective equipment, emergency procedures)
- Site-specific orientation
- Sample collection techniques used during each sampling event
- The Site's health and safety plan

Any contractor performing on-site fieldwork will have a contractor-prepared Health & Safety Plan as required by the Site's contractor management process.

This page intentionally left blank

FIGURE


PW-11
PW-12
MW-8A
MW-6
12MW-16S
MW-20S
12MW-13S
12MW-14S
12MW-14D
7MW-19S
7MW-18S
SC-4
17MW-17S
SC-2
LEGEND
MW-8A CURRENT RCRA SAMR PROGRAM WELLS
SG-2 SURFACE WATER SAMPLING LOCATION
SWMU AND WELL LOCATION MAP
ARCADIS
1

This page intentionally left blank

TABLE

Table 1
Seaford SAMR Sampling Program
SAMR Work Plan
Seaford Nylon Plant, Seaford, DE

SAMR Sampling Activities											
Sampling Locaton[a]	Water Level Measurement	Water Quality Analysis[b]	pH (SM 4500 H/B)	Specific Conductance (SM20 2510 B)	Total Dissolved Solids (SM20 2540 C)	Alkalinity as $CaCO_3$ to pH 4.5 and 8.3 (SM20 2320 B)	Sulfate (EPA 375.4)	Dissolved Arsenic (SW-846 6020)	Total Arsenic (SW-846 6020)	Phosphorus, total as PO4 (EPA 365.1)	Hardness as $CaCO_3$ (SM20 2340 C)
Groundwater											
MW-6*	1										
MW-8A	1	1	1	1	1	1	1	1	1	1	1
7MW-18S	1	1	1	1	1	1	1	1	1	1	1
7MW-18S*	1	1	1	1	1	1	1	1	1	1	1
7MW-20S*	1	1	1	1	1	1	1	1	1	1	1
12MW-14S	1	1	1	1	1	1	1	1	1	1	1
12MW-14D	1	1	1	1	1	1	1	1	1	1	1
12MW-15S	1	1	1	1	1	1	1	1	1	1	1
12MW-16S	1	1	1	1	1	1	1	1	1	1	1
17MW-17S	1	1	1	1	1	1	1	1	1	1	1
PW-11	1	1	1	1	1	1	1	1	1	1	1
PW-12**	1	1	1	1	1	1	1	1	1	1	1
Surface Water											
SG-2	1	1	1	1	1	1	1	1	1	1	1
SG-4	1	1	1	1	1	1	1	1	1	1	1
Total Samples	NA	13	13	13	13	13	13	13	13	13	13

[a] Samples will be collected at the indicated location for each annual event.
[b] Water Quality Parameters include dissolved oxygen, oxidation-reduction potential, pH, temperature, electrical conductivity, turbidity, color and odor.
* Wells were plugged & abandoned 7/12/2012 when ash ponds were closed; wells were re-installed in July 2014
** Production Well #12 is out of service. If it is placed back into service, it will be sampled. Until it is placed back into service, only water level measurements will be taken.

APPENDIX A
SEAFORD FACILITY SAMR
FIELD SAMPLING LOG

Seaford Facility SAMR Field Sampling Log

The following is an example of a form for field sampling logs. This form or a form reflecting comparable information will be used during field sampling.

Field Personnel														
Field Data	**MW-6**		**MW-8A**		**7MW-18S**		**7MW-19S**		**7MW-20S**		**12MW-14S**		**12MW-14D**	
Time/Date														
Depth to Water (ft)														
Pumping Rate (L/minute)														
pH														
Temp (C°)														
Spec. Cond. (umho/cm)														
D.O. (mg/L)														
Redox (mV)														
Turbidity (ntu)														
Color														
Odor														
Lab Samples Collected	**MW-6**		**MW-8A**		**7MW-18S**		**7MW-19S**		**7MW-20S**		**12MW-14S**		**12MW-14D**	
Dissolved Arsenic	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Arsenic	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Phosphorus	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sulfate	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Alkalinity	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Hardness	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Spec. Cond.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Dis. Solids	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
pH	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Seaford Facility SAMR Field Sampling Log

Field Data	12MW-15S	12MW-16S	12MW-17S	PW-11	PW-12	SG-2	SG-4
Time/Date							
Depth to Water (ft)							
Pumping Rate (L/minute)							
pH							
Temp (C°)							
Spec. Cond. (umho)							
D.O. (mg/L)							
Redox (mV)							
Turbidity (ntu)							
Color							
Odor							

Lab Samples Collected	12MW-15S		12MW-16S		12MW-17S		PW-11		PW-12		SG-2		SG-4	
Dissolved Arsenic	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Arsenic	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Phosphorus	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Sulfate	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Alkalinity	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Hardness	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Spec. Cond.	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total Dis. Solids	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
pH	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Composite sample of monitoring well purge water collected for arsenic TCLP analysis		**Yes**	**No**
Team Leader sign/date when fieldwork is complete	Signature	Date	